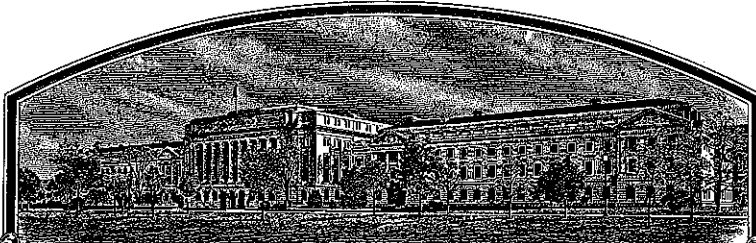


No.

200600177



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Seminis Vegetable Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, GARDEN

'Firstmate'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of July, in the year two thousand and eight.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

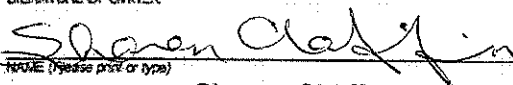
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Seminis Vegetable Seeds, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME XP 15330733	3. VARIETY NAME Firstmate
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 2700 Camino del Sol Oxnard CA 93030-7967		5. TELEPHONE (include area code) (805) 647-1572	FOR OFFICIAL USE ONLY PVPO NUMBER 200600177 FILING DATE APRIL 10, 2006
		6. FAX (include area code) (805) 918-2545	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation	8. IF INCORPORATED, GIVE STATE OF INCORPORATION California	9. DATE OF INCORPORATION 4 June 1962	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <div style="display: flex; justify-content: space-between;"> <div> Sharen Chaffin Seminis Vegetable Seeds, Inc. 37437 State Hwy 16 Woodland CA 95695 </div> <div> Marcel Bruins (marcel.bruins@seminis.com) Seminis Vegetable Seeds, Inc. Physical address: Wageningense Afweg 31 NL-6702 PD Wageningen, The Netherlands (Postal: P.O. Box 97, NL-6700 AB Wageningen The Netherlands) PH: 31 317 468 428; FAX: 31 317 468 431 </div> </div>			FILING AND EXAMINATION FEES: \$ 4,382.00 DATE 4/10/06 CERTIFICATION FEE: \$ 768.00 DATE 6/12/08
11. TELEPHONE (include area code) (530) 669-6172	12. FAX (include area code) (530) 666-4426	13. E-MAIL sharen.chaffin@seminis.com	
14. CROP KIND (Common Name) Bean, garden	16. FAMILY NAME (Botanical) Leguminosae	15. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) YES / NO	
15. GENUS AND SPECIES NAME OF CROP Phaseolus vulgaris	17. IS THE VARIETY A FIRST GENERATION HYBRID? YES / NO	IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit g. <input type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) h. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) YES (if "yes", answer items 21 and 22 below) / NO (if "no", go to item 23) 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? YES / NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? YES / NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER  NAME (Please print or type) Sharen Chaffin		SIGNATURE OF OWNER NAME (Please print or type)	
CAPACITY OR TITLE Specialist	DATE 4-7-06	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). **NEW:** With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

Plant Variety Protection Office
Telephone: (301) 504-5518 FAX: (301) 504-5291
General E-mail: PVP@mail.usda.gov
Homepage: <http://www.ams.usda.gov/science/pvpo/PVPindex.htm>

200600177

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
 - (2) the details of subsequent stages of selection and multiplication;
 - (3) evidence of uniformity and stability; and
 - (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

US: Sale in May 2005; AU: Sale in April 2006; CA: Sale in March 2006

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

EXHIBIT A

200600177

Origin and Breeding History of Garden Bean, Firstmate (EX 15330733)

Firstmate (EX 15330733) was developed by backcross breeding and pedigree selection at Seminis Vegetable Seed's Breeding Stations in Filer / Twin Falls, Idaho and De Forest, Wisconsin U.S.A. under the direction of George Kotch. Firstmate originates from a hand pollinated cross between the variety Labrador and the Harris Moran line HMX8962 that was then backcrossed to HMX8962.

Parent A: Labrador (Expired US PVP # 8300067) was developed and is marketed by what has become Seminis Vegetable Seeds Inc. Labrador is 4 sieve bean that will often produce 20% 5 sieve beans. Labrador has a dark green color and is used primarily as a cut bean by the processing industry. PVP was applied for in September of 1979 and subsequently granted.

Parent B: HMX8962 was the experimental number assigned to the variety which later was named HyPak. Hypak failed to become an establish variety and is no longer marketed by Harris Moran. HMX8962 was a medium to large sieve green bean developed for the processor market. Observations at Filer, Idaho in 1995 and 1996 by Seminis researchers suggested that HMX8962 would not be a good seed producer.

Breeding / Selection / Evaluation Scheme:

Year	Season	Gen.	Location	Description
1992	Fall	F1 A/B	Greenhouse Filer, ID	Initial cross made. Labrador (A) was grown under stake under number R92gh.3919. HMX8962 (B) was grown under stake number R92gh.3915. Seven crosses were made AxB
1993	Spring	Bc1 A/B//B	Greenhouse Filer, ID	10 F1s were grown under stake R93gh.58. Labrador and HMX8962 were grown under stake numbers R93gh65 and R93gh68 and back crossed to the F1. Crosses A/B//B & A/B//A were completed and 71 seeds harvested from A/B//B
1993	Summer	Bc1F1	Field Filer, ID	71 Bc1F1 seeds A/B//B were planted under stake number R93.4750.45 and harvested as single plants. (.01-.69)
1994	Summer	Bc1F2	Field Filer, ID DeForest, WI	2 packets 30 seeds each were packaged from each single plant Bc1F2. Single rows were planted in Filer, ID under stake numbers R94.10248 to R94.10318 and at DeForest, WI under stake numbers BS94.450 to BS94.520. 20 Single plant selections from 5 families were harvested.
1995	Fall	Bc1F3	Screen House Salama, Guatemala	Several pots (thinned to one plant) of each single plant selection from were planted in Guatemala. Single plant selection BS94.473.01 gave rise to the single plant increase Guat95:1347.02.

200600177

1998	Summer	Bc1F4	Field DeForest, WI	Single rows of the Guatemala increase were planted at the DeForest research station in Wisconsin. 6 uniform plants were bulked from the plot BS98:4003.
1998	Fall	Bc1F5	Screen House Salama, Guatemala	50 pots were planted with 4 seeds and thinned to 2 plants per pot under the stake number GUAT99:115. Seed of each plant was harvested and placed in a separate envelope as a Generation "0" increase.
1999	Summer	Bc1F5+1	Field Filer, ID	Generation 0 was planted and examined for off types. No off types were observed and single rows were bulked under the stake number RWK770.

The Seminis foundation seed program in Idaho utilizes a progeny to row design. Observations made during 6 generations of multiplication and increases in Idaho indicated that Firstmate was uniform and stable for plant habit, maturity, pod type, and other horticultural and agronomic characteristics. As is true with other garden beans, a very small percentage of mutations or variants for flat pods or string may occur during the course of repeated replication. Firstmate was within the commercially acceptable limits of .1% (for flat pods) and .01% (for string) for this type of mutation / variant. No other variants or off-types are known or expected to occur.

EXHIBIT B

200600177

Statement of Distinctness for Garden Bean, Firstmate (EX 15300733)

Firstmate is a green snap bean for the processor market in the United States developed by backcross and pedigree selection. To our knowledge, the variety being marketed that most closely resembles Firstmate is Labrador (Expired US PVP # 8300067) from Seminis Vegetable Seeds Inc. Both varieties are 4 sieve beans which are marketed and adapted for processor sales in the North Central and Northeast United States. Both cultivars have a deep green color and produce high quality 4 sieve beans for cross cut product. However, both cultivars can produce 15-20% 5 sieve beans.

The comparative characteristic that most readily distinguishes the two varieties) includes, but may not be limited to seed color. Firstmate has the persistent green trait resulting in green seed whereas Labrador is white seeded and does not carry the gene for persistent green color.

Since the HMX8962 is no longer available or marketed no comparison was possible.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Garden Bean (*Phaseolus vulgaris* L.)

NAME OF APPLICANT (S) Seminis Vegetable Seeds	TEMPORARY OR EXPERIMENTAL DESIGNATION 15330733	VARIETY NAME FIRST MATE
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) 2700 Camino del Sol Oxnard, CA 93030		PVPO NUMBER 2006 00 177

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., or) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties centered in the same trial. Measured data should be for SPACED PLANTS. Ranges should also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____

Please answer all questions for your variety; lack of response may delay progress of your application.

1. TYPE:

1 = Garden

2 = Flageolet

3 = Romano

2. MARKET MATURITY:

Days to Edible Pods

Heat Units to Edible Pods

Number of Days Earlier Than

Same As

Comparison Variety

Number of Days Later Than

Comparison Varieties

1 = Tender crop

3 = Gold rush

5 = Gitana

7 = Bush Blue Lake 290

8 = Other (Specify Below)

2 = Kentucky Wonder

4 = Slenderette

6 = Provider

Labrador

3. PLANT:

cm Spacing Between Plants in a Row

Habit

1 = Determinate

2 = Indeterminate, Erect Stem and Branches

3 = Indeterminate with Weak and Prostrate Stem and Branches

4 = Indeterminate Climbing Habit with Weak, Long, and Twisted Stem and Branches

cm Height

cm Shorter Than

Same Height As

Comparison Variety

cm Taller Than

Use Comparison Varieties from Section 2

6

3. PLANT: (continued)

49

cm Spread

3

cm Narrower Than

8

Same Width As

1

cm Wider Than

1

Comparison Variety

Use Comparison Varieties from Section 2

3

Pod Position: 1 = Low 2 = High 3 = Scattered

3

Bush Form (Illustrated Below)



1 = Spherical Bush Form



2 = Stem Bush Form



3 = Wide Bush Form



4 = High Bush Form

5 = Other (Specify) _____

4. LEAVES:

3

Surface: 1 = Dull 2 = Glossy 3 = Indeterminate

3

Size: 1 = Small (Gitana) 2 = Medium 3 = Large (Tender Crop)

2

Color: 1 = Light Green (as Light or Lighter than Gold Rush)
2 = Medium Green
3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)

5. ANTHOCYANIN PIGMENT:

(1 = Absent

2 = Present)

1

Flowers

1

Stems

1

Pods

1

Seeds

1

Leaves

1

Petioles

1

Peduncles

1

Nodes

6. FLOWER COLOR AND DAYS TO BLOOM:

2

Color of Standard

1

Color of Wings

1

Color of Keel

49

Days to 50% Bloom

Flower Color Choices

1 = White 2 = Cream

3 = Pink 4 = Lilac

5 = Purple 6 = Blue

7 = Other (Specify) _____

7. PODS (Edible Maturity):

3

Exterior Color:
(Fresh)

1 = Light Green (as Light or Lighter than Provider)

2 = Medium Green

3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)

4 = Yellow (Gold Rush)

5 = Green-red Variegated (Horticultural)

6 = Other (Specify) _____

2

Processed Pods (Exterior Color):

1 = Light (Tender Crop)

2 = Dark (Bush Blue Lake 290)

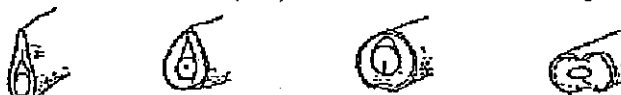
2

Dry Pod Color:

1 = Buckskin (Sprite)

2 = Green, Persistent Chlorophyll (Hystyle)

7. PODS (continued):

- 4 Cross Section Pod Shape: 1 = Flat 2 = Heart (Pear) 3 = Round 4 = Figure Eight
(Middle of the Pod)
- 

- 1 Crease Back: 1 = Present 2 = Absent
- 2 Pubescence: 1 = None (Slenderette) 2 = Sparse 3 = Considerable (Provider or Sprite)
- 2 Constriction (Interlocular Cavitation): 1 = None 2 = Slight 3 = Deep
- 0 7 mm Spur Length
- 1 Fiber: 1 = None (Bush Blue Lake 290) 2 = Sparse 3 = Considerable (Sprite)
- 6 Number of Seeds per Pod
- 1 Suture String: 1 = Present 2 = Absent
- 2 Seed Development: 1 = Slow (Bush Blue Lake 290) 2 = Medium 3 = Fast (Provider)
- 1 Machine Harvest: 1 = Adapted 2 = Not Adapted


Percent sieve size distribution at optimum maturity for not-flat pods

4.76 to 5.76mm	5.76 to 7.34mm	7.34 to 8.34mm	8.34 to 9.53mm	9.53 to 10.72 mm	>10.72mm
← 10 %	→ 10 %	10 %	50 %	30 %	%
3 Sieve	<input type="text"/> <input type="text"/> cm Length	<input type="text"/> <input type="text"/> mm width	<input type="text"/> <input type="text"/> Total mm Thickness		
4 Sieve	<input type="text"/> <input type="text"/> cm Length	<input type="text"/> <input type="text"/> mm width	<input type="text"/> <input type="text"/> Total mm Thickness		
5 Sieve	<input type="text"/> <input type="text"/> 1 4 cm Length	<input type="text"/> <input type="text"/> 9 3 mm width	<input type="text"/> <input type="text"/> 9 3 Total mm Thickness		
6 Sieve	<input type="text"/> <input type="text"/> cm Length	<input type="text"/> <input type="text"/> mm width	<input type="text"/> <input type="text"/> Total mm Thickness		

8. SEED COLOR:

- 3 Seed Coat Luster: 1 = Shiny 2 = Dull 3 = Semi-Shiny 4 = Variable
- 1 Seed Coat: 1 = Monochrome 2 = Polychrome
- 1 1 Primary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple
9 = Blue 10 = Black 11 = Other persistent green
- Secondary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple
9 = Blue 10 = Black 11 = Other
- 1 Seed Coat Pattern: 1 = Solid 1 = Splashed 3 = Mottled 4 = Striped 5 = Flecked 6 = Dotted
- 1 Hilum Ring: 1 = Absent 2 = Present
- Hilum Ring Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple
9 = Blue 10 = Black 11 = Other

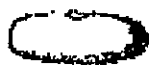
9. SEED SHAPE AND SIZE:

- 1 Hilum View:
- 
- 1 = Elliptical 2 = Oval 3 = Round
- 2 Cross Section: 1 = Elliptical 2 = Oval 3 = Cordate 4 = Round

9. SEED SHAPE AND SIZE: (continued)

1

Side View:



1 = Oval to Oblong



2 = Round



3 = Reniform

2 6

gm/100 Seeds

[]

gm/100 Seeds Lighter Than

[]

[] 2

gm/100 Seeds Same As

[]

gm/100 Seeds Heavier Than

8

Comparison Variety

10. DISEASE RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

1

Anthracnose (*Colletotrichum lindemuthianum*)

[]

Race Alpha

[]

Race Beta

[]

Race Gamma

[]

Race Delta

[]

Race Epsilon

[]

Race Lambda

[]

Race Kappa

[]

Specify Race _____

1

Bean Rust (*Uromyces appendiculatus*)

[]

Race 38

[]

Race 39

[]

Race 40

[]

Race 44

[]

Race 45

[]

Race 46

[]

Race 49

[]

Race 50

[]

Race 51

[]

Race 52

[]

Race 54

[]

Race 56

[]

Race 59

[]

Specify Race _____

0

Powdery Mildew (*Erysiphe polygoni*)

0

Fusarium Root Rot (*Fusarium solani* f. sp. *phaseoli*)

0

Pythium Root Rot (*Pythium* spp.)

1

Aphanomyces Root Rot (*Aphanomyces euteiches*)

0

Rhizoctonia Root Rot (*Rhizoctonia solani*)

0

Pythium Blight or Aerial Pythium (*Pythium ultimum*)

0

Angular Leaf Spot (*Isariopsis griseola*)

0

Bacterial Wilt (*Corynebacterium flaccumifaciens* subsp. *flaccumifaciens*)

2

Bacterial Brown Spot (*Pseudomonas syringae* pv. *syringae*)

0

Common Bacterial Blight (*Xanthomonas campestris* pv. *phaseoli*)

1

Halo Blight (*Pseudomonas syringae* pv. *phaseolicola*)

[]

Race 1

[]

Race 2

0

Clover Yellow Vein Virus (CYVV)

2

Bean Common Mosaic Virus (BCMV)

[]

BV1

[]

NY15

[]

NL2

[]

NL3

[]

NL4

[]

NL8

[]

Florida

[]

Idaho

[]

Mexican

[]

Western

[]

Type

X

Other (Specify) "I" gene resistance

0

Yellow Bean Mosaic Virus (BYMV)

2

Curly Top Virus (BCTV)

[]

Other (Specify Disease and Race or Strain _____)

11. INSECT RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

<input type="text" value="0"/>	Aphid	<input type="text" value="0"/>	Root Knot Nematode
<input type="text" value="0"/>	Leafhopper	<input type="text" value="0"/>	Seed Corn Maggot
<input type="text" value="0"/>	Lygus	<input type="text" value="0"/>	Thrips
<input type="text" value="0"/>	Pod Borer	<input type="text" value="0"/>	Weevils
<input type="text"/>	Other (Specify) _____		

12. PHYSIOLOGICAL RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

<input type="text" value="0"/>	Heat	<input type="text" value="0"/>	Cold	<input type="text" value="0"/>	Drought
<input type="text" value="0"/>	Air Pollution	<input type="text" value="2"/>	Ozone		
<input type="text"/>	Other (Specify) _____				

13. COMMENTS:

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE**EXHIBIT E**
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Seminis Vegetable Seeds, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER XP 15330733	3. VARIETY NAME Firstmate
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 2700 Camino del Sol Oxnard CA 93030-7967	5. TELEPHONE (Include area code) (805) 647-1572	6. FAX (Include area code) (805) 918-2545
7. PVPO NUMBER 2006 00 177		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

The variety named in this application was developed by the Seminis Vegetable Seeds, Inc., employee (breeder) named below. Unless otherwise stated, all rights to the varieties developed by Seminis Vegetable Seeds, Inc. are assigned to the Company by agreement or by operation of law. No rights to such invention, discovery or development are retained by the employee(s).

Employee (Breeder): Ken Kmiecik

Site Location: DeForest, WI

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

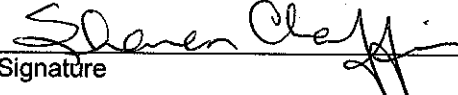
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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT F
DECLARATION REGARDING DEPOSIT**

NAME OF OWNER (S) Seminis Vegetable Seeds, Inc.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 2700 Camino del Sol Oxnard, CA 93030-7967	TEMPORARY OR EXPERIMENTAL DESIGNATION XP 15330733 VARIETY NAME Firstmate
NAME OF OWNER REPRESENTATIVE (S) Sharen Chaffin	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 37437 State Hwy 16 Woodland CA 95695	<div style="background-color: #cccccc; padding: 2px;">FOR OFFICIAL USE ONLY</div> PVPO NUMBER 2006 00 177

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.


 Signature

4-7-06
 Date